UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

10054865

September 26, 2002

4WD-SSMB

MEMORANDUM

SUBJECT: Five-Year Review Report
Mathis Brothers Landfill (South Marble Top Road) Site
Kensington, Walker County, Georgia
GAD980838619

FROM: Mario E. Villamarzo, Chief
AL/GA/MS Section

9-27-02

THRU: Carol Monell, Chief
South Site Management Branch

TO: Richard D. Green, Director
Waste Management Division

Attached please find a copy of the Five-Year Review Final Report for the Mathis Brothers Landfill (South Marble Top Road) Site located in Kensington, Walker County, Georgia. Section 121(c) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended requires that if a remedial action is taken that results in any hazardous substances, pollutants, or contaminants remaining at a site, the Environmental Protection Agency (EPA) shall review such remedial action no less often than each five years after initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.

The Record of Decision (ROD) for this Site was signed on March 24, 1993. The selected remedial action for this site included diverting surface water away from the landfill; excavating approximately 4,000 cubic yards of surface soil and debris, with onsite incineration and disposal of treated soil, and onsite or offsite disposal of residuals; treating approximately 97,700 cubic yards of contaminated subsurface soil using ex- situ biodegradation to remove organics through bacterial and/or fungal metabolism, based on the results of a treatability study, with onsite disposal of treated soil and onsite or offsite disposal of residuals; placing a RCRA clay cap over the treated material; installing an interceptor trench for collection of approximately 1,500,000 gallons of ground water, with temporary onsite storage, followed by offsite treatment and discharge; monitoring soil, ground water, and surface water; and implementing institutional controls. The function of this remedy was to treat contamination and reduce it to health-based levels. Source material and contaminated soils are the principal threat at the site. The estimated present worth cost for this remedial action was $12,980,000, which includes an annual O&M cost of $1,152,000 for 2.5 years.

Based on information obtained during the remedial design, it was determined that the same level of protectiveness of human health and the environment could be provided in a more cost effective manner. The September 27, 1996 amended remedy consists of off-site incineration/disposal, fuels blending, on-site Bioslurry, disposal of non-hazardous waste in a subtitle D landfill, and collection and if necessary treatment of ground water generated during excavation. The ground-water interceptor trench was replaced with quarterly ground-water monitoring. The ROD amendment provided for changes in the original remedial action that resulted in substantial savings without undermining the protectiveness or effectiveness of the remedy. The estimated present worth cost for this remedial action was $5,000,000 (including O&M) The trigger for this Five-Year Review is the March 18, 1997 initiation of the remedial action by the PRPs.

The Report has gone through EPA Region 4 review. Based upon this review, it has been determined that the remedial action taken at this Site continues to be protective of human health and the environment. No deficiencies were noted during the five-year review. At this time we are seeking the Division Director's approval of this document.

Approved by: _____ Date: 9/27/02

Five-Year Review Report

First Five-Year Review Report

For

Mathis Brothers Landfill (South Marble Top Road)
(EPA ID #: GAD980838619)

Kensington
Walker County, Georgia

September 2002

Prepared by:
US Army Corps of Engineers
Savannah District
P. O. Box 889
Savannah, GA 31402-0889

Approved by:

Date:

Richard D. Green,
Director, Waste Management Division
US EPA, Region 4

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Attachments

List of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
CD	Consent Decree
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Chain of Custody
EPA	Environmental Protection Agency
EPD	Georgia Environmental Protection Division
GCL	Geosynthetic Clay Liner
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	National Priorities List
O&M	Operations and Maintenance
OUs	Operable Units
PCE	tetrachloroethene
PRP	Potentially Responsible Party
QA/QC	Quality assurance / Quality Control
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
SARA	Superfund Amendment and Reauthorization Act
SVOCs	Semi-Volatile Organic Compounds
TCE	trichloroethene
UAO	Unilateral Administrative Order
USACE	U.S. Army Corps of Engineers
VOCs	Volatile Organic Compounds

Executive Summary

This is the first five-year review for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site. The trigger for this statutory review is the initiation of the remedial action as shown in EPA's WasteLAN database: 18 March 1997. Hazardous substances, pollutants, or contaminants are left on site above levels that allow for unlimited use and unrestricted exposure. All remedies have been constructed and continue to operate as intended

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name: Mathis Brothers Landfill (S. Marble Top Rd)		
EPA ID: GAD980838619		
Region: IV	State: GA	City/County: Kensington, Walker County
SITE STATUS		
NPL status: Currently on the Final NPL		
Remediation status (under construction, operating, complete): Complete		
Multiple OU's*: NO Construction completion date: 28 September 1998		
Has site been put into reuse? NO		
REVIEW STATUS		
Lead agency (EPA, State, Tribe Federal agency): US Army Corps of Engineers		
Author name: Steven Bath		
Author title: Environmental Engineer	Author affiliation: US Army Corps of Engineers, Savannah District	
Review period: 1 March 2002 to 18 September 2002		
Date(s) of site inspection: 3-4 April 2002		
Type of Review: Post- SARA		
Review Number: 1 (first)		
Triggering action event: First Five-Year Review Completion Date		
Trigger action date (from WasteLAN): 03/18/1997		
Due date: 3/18/ 2002		

*** "OU" refers to operable unit.**

Five –Year Review Summary Form, cont,d.

Issues:

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protective ness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

Recommendations and Follow-up Actions:

Continued ground-water monitoring is required to ensure contaminants are attenuating naturally. Institutional controls in the form of deed restrictions must be implemented to prevent possible ground-water exposure.

Protectiveness Statements:

The remedial actions at the site are expected to be protective of human health and the environment upon attainment of ground-water cleanup goals. Contaminant levels in ground water appear to be declining over time to acceptable risk based concentrations.

Other Comments:

None

I. Introduction

The United States Environmental Protection Agency (EPA) Region IV has conducted a five-year review of the remedial actions implemented at the Mathis Brothers Landfill (South Marble Top Road) Superfund Site in Walker County, Georgia. Technical support for the review was provided by the U.S. Army Corps of Engineers, Savannah District. This review was conducted from March 2002 through September 2002. This report documents the results of that review. The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review Reports identify issues found during the review, if any, and identify recommendations to address them.

EPA conducted this review pursuant the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), section 300.430(f)(4)(ii). Because a remedial action was selected that allows contaminants to remain on site above levels that allow for unlimited use and unrestricted exposure, EPA is required to review such action no less than every five years after the initiation of the selected remedial action. The statutory five-year review requirement was added to CERCLA as part of the Superfund Amendments and Reauthorization Act of 1986 (SARA). EPA conducts statutory reviews when both of the following conditions are true: 1) upon completion of the remedial action, hazardous substances, pollutants or contaminants will remain above levels that allow for unlimited use and unrestricted exposure; 2) the record of decision (ROD) for the site was signed on or after 17 October 1986 (the effective date of SARA).

This is the first five-year review for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site. The trigger for this statutory review is the initiation of the remedial action as shown in EPA's WasteLAN database: 18 March 1997. Hazardous substances, pollutants, or contaminants are left on site above levels that allow for unlimited use and unrestricted exposure. All remedies have been constructed and continue to operate as intended.

II. Site Chronology

Table 1 lists the chronology of events for the Mathis Brothers Landfill (South Marble Top Road) Superfund Site.

Table 1: Chronology of Site Events

Event	Start Date	Completion Date
Discovery		12/01/1983
Preliminary Assessment		03/01/1984
Site Inspection		08/01/1984
HRS Package		07/15/1986
Proposal to NPL		01/22/1987
Non-NPL PRP Search		06/12/1987
NPL RP Search		09/18/1987
Admin Order on Consent		11/02/1988
RI/FS Negotiations	05/13/1988	11/02/1988
Final Listing NPL		03/31/1989
Human Health Risk assessment		11/15/1991
Ecological Risk Assessment		11/15/1991
Removal Assessment	12/31/1992	12/31/1992
PRP RI/FS	11/02/1988	03/24/1993
Record of Decision		03/24/1993
Administrative Records	04/20/1992	04/20/1993
RD/RA Negotiations	03/31/1993	08/19/1993
Unilateral Admin Order		08/19/1993
ROD Amendment		09/27/1996
PRP RD	10/14/1993	03/18/1997
PRP RA	03/18/1997	09/28/1998
Admin Order on Consent		09/20/2000

III. Background

The 10-acre Mathis Brothers Landfill (South Marble Top Road) site is a landfill area surrounded by undeveloped, forested land in Walker County, Georgia. Land use in the area is predominantly agricultural and residential, with the nearest residence located 400 feet southwest of the site. The site borders drainage valleys to the north and south, each containing an intermittent stream during prolonged rainfall events. Vegetation is present over the once-cleared portions of the site and includes various grasses and pine trees. Surface water features at the site consist of rainfall runoff, seeps, drainage valleys, and standing water. The site also overlies two aquifers, the Knox Surficial Aquifer and the Knox Bedrock Aquifer.

From 1974 to 1980, Messrs Sidney and Mose Mathis operated the site as a landfill and utilized three separate disposal areas. Types of drummed waste disposed of at the site included: benzonitrile waste, dicamba by products, 1,4-dichlorobenzene, latex, and carpet wastes. Benzonitrile waste is a black thermo-plastic polymer and tar generated from the distillation of benzonitrile. Dicamba is used as an herbicide for broadleaf weeds, grasses and grain crops. Constituents of the latex wastes include styrene, vinyl chloride and phthalates. These constituents are hazardous substances and were detected in the environment at the site. Other waste known to have been disposed of at the site were not hazardous.

In 1974, the State EPD notified the owners to stop accepting latex and industrial solid wastes after a milky discoloration was observed in the ground near the northeast portion of the landfill. Shortly thereafter, the site was allowed to accept non-hazardous waste and in 1975 was granted a solid waste handling permit. In 1980, State studies determined that the landfill did not conform to the pending federal and state statutory requirements of RCRA and the landfill was closed. In 1983, a subsequent State inspection noted that the landfill had not been closed in accordance with federal requirements and, therefore, required that the site be brought into compliance. Georgia EPD referred the site to EPA. Studies during the RI showed organic and inorganic contamination of soil and ground water appeared to be the result of improper disposal practices at the landfill, seepage of leachate, and surface water runoff.

The ROD addresses the source of the contamination, including the contaminated soil and debris, as the first and final remedial action for the site. The primary contaminants of concern affecting the soil, debris, ground water, and surface water are VOCs, including benzene, PCE, TCE, toluene, and xylenes; other organics; and metals, including chromium and lead.

IV. Remedial Actions

Remedy Selection

The original selected Record of Decision was signed in March of 1993. The selected remedial action for this site included diverting surface water away from the landfill; excavating approximately 4,000 cubic yards of surface soil and debris, with onsite incineration and disposal of treated soil, and onsite or offsite disposal of residuals; treating 97,700 cubic yards of contaminated subsurface soil using ex- situ biodegradation to remove organics through bacterial and/or fungal metabolism, based on the results of a treatability study, with onsite disposal of treated soil and onsite or offsite disposal of residuals; placing a RCRA clay cap over the treated material; installing an interceptor trench for collection of 1,500,000 gallons of ground water, with temporary onsite storage, followed by offsite treatment and discharge; monitoring soil, ground water, and surface water; and implementing institutional controls. The function of this remedy is to treat contamination and reduce it to health-based levels. Source material and contaminated soils are the principal threat at the site. The estimated present worth cost for this remedial action is S12,980,000, which includes an annual O&M cost of $1,152,000 for 2.5 years.

The major components of the selected remedy as stipulated in the March 1993 Record of Decision include:

- Diversion of surface water;
- Excavation of waste and soil (analysis of carpet and latex waste for determination of appropriate disposal options);
- On-site incineration and disposal of chemical wastes and associated contaminated landfill soil;
- Treatability Studies to determine the effectiveness of biodegradation (an innovative technology with which microorganisms are used to break down contaminants) of contaminated subsurface soil; if successful, implementation of biodegradation with on-site disposal of treated soil;
- A RCRA Solid Waste clay cap would be placed over treated material;
- Installation of interceptor trench for ground-water collection with on-site storage and off-site treatment and disposal;
- Combined institutional control activities;
- If biodegradation is unsuccessful in treating contaminated subsurface soils EPA will consider other remedial alternatives and amend the ROD if necessary.

Based on information obtained during the remedial design, it was determined that the same level of protectiveness of human health and the environment could be provided in a more cost effective manner. The September 1996 amended remedy consists of off-site incineration/disposal, fuels blending, on-site Bioslurry, disposal of non-hazardous waste in a subtitle D landfill, and collection and if necessary treatment of ground water generated during excavation. The ground-water interceptor trench was replaced with quarterly ground-water monitoring. The ROD amendment provides for changes in the original remedial action that result in substantial savings without undermining the protectiveness or effectiveness of the remedy. The estimated present worth cost for this remedial action is $5,000,000 (including O&M)

The major components of the September 1996 amended remedy include:

- Diversion of surface water;
- Excavation of waste and soil and segregation of the excavated material;
- Collection and, if necessary, off-site treatment of groundwater during excavations;
- Subtitle D landfill disposal of non-hazardous waste;
- Off-site fuels blending of benzonitrile and benzoic acid waste at a RCRA approved facility;
- Off-site incineration and disposal of hazardous wastes and associated contaminated landfill soil;
- Bioremediation of dicamba waste using bioslurry technology that was successfully demonstrated during the RD treatability studies. If full scale bioremediation (bioslurry) is ineffective or not cost effective in treating dicamba waste and soils, the waste will be treated at an approved off-site incineration facility;
- Backfilling of the excavation with clean fill;
- A low permeability cap would be placed over the backfilled material;
- Installation of additional monitoring wells for ground-water monitoring and if future sampling indicates that ground-water contamination exceeds MCLs, ground-water extraction and treatment may be required.
- Institutional control activities (deed restrictions limiting ground-water use.

Remedy Implementation

Remedy Component 1- Diversion of Surface Waters
During the remedial action, the site was graded with berms around the excavation to prevent ground water from entering the excavation. At the completion of remedial activities, the site was graded to divert surface water away from the capped area.

Remedy Component 2 – Excavation of Waste and Soil
Over 21,300 cubic yards of landfill material and contaminated soil was excavated from the site. Confirmation samples were collected from the excavation bottom at a rate of one sample per 1500 square feet of excavation. Where confirmatory samples indicated material still exceeded the accepted regulatory action level, more soil was excavated and the area was resampled.

Remedy Component 3 – Segregation, Treatment/Disposal of Waste
The material excavated was stockpiled in two staging areas and sampled for analysis. Based on the analytical results, the material was disposed of at either a Subtitle D landfill, incinerator, or Subtitle C landfill. An estimated 841,826 gallons of water was transported off-site for treatment/disposal. The water included storm water and ground water collected from the excavation and decontamination fluids.

Remedy Component 4 – Clay Cap
The excavation was backfilled with 18,496 cubic yards of offsite borrow. A low permeability Geosynthetic Clay Liner (GCL) was then installed over the backfilled area extending 20 feet beyond the excavation limits. Six inches of fill dirt topped by six inches of topsoil were placed over the cover. A vegetative cover was then established over the topsoil layer. Landfill cover and seep inspections were conducted semi-annually for the duration of the RA program.

Remedy Component 5 – Ground-Water Monitoring
The ground-water monitoring program consisted of quarterly ground-water monitoring for a period of two years. Ground-water samples were collected from monitoring wells MW-1 through MW-21. Ground-water samples were analyzed for VOCs by SW8260, SVOCs by SW8270, herbicides by SW8150, and metals by SW6010/7000. Based on the results of the quarterly monitoring, three wells, MW-4, MW-9 and MW-19, were placed on a semi-annual sampling schedule while the remaining wells were reduced to annual sampling.

Remedy Component 6 – Combined Institutional Control Activities
A security fence has been erected around the site with warning signs posted to limit access by unauthorized personnel. Deed restrictions have not been placed on the site as was required by the ROD. EPA continues to work on this issue.

Remedy Component 7 – Bioslurry Treatment of Dicamba Waste
Dicamba wastes were noted through out the landfill excavation but in quantities too small to be segregated from other waste and soils. Analytical results indicate the concentrations of dicamba detected were below the accepted regulatory standard. Therefore bioslurry treatment was not needed and was not implemented

Performance Standards
Soil clean-up levels were based on the direct leaching model AL=(foc) (Koc) (HBN) where AL is the soil action level, foc is the fraction organic carbon, Koc is the organic carbon water partition coefficient, and HBN is a health-based number for the protection of ground water, such as an MCL. When ARARs were not available for specific compounds or exposure media, the clean-up goals were based on non-promulgated advisories or guidance such as proposed federal MCLGs, lifetime Health Advisories (HAs), and reference dose (RfD) based guidelines. The cleanup goals for soil and shallow ground water are shown on the following tables.

Table 2
Cleanup Levels for Soil

Chemical	Soil Action Level (mg/Kg)
benzene	0.014
bis (2-ethylhexyl) phthalate	40,440
1,4-dichlorobenzene	0.43
dicamba	1532

Table 3
Cleanup Levels for Shallow Ground Water

Chemical	Action Level (ug/L)
acetone	3,500
benzene	5
benzoic acid	140,000
benzonitrile	43
benzyl alcohol	10,500
bis (2-ethylhexyl) phthalate	6
chlorobenzene	100
chromium	100
2,4-D	70
dicamba	1,050
Dichlorodifluoromethane	7,000
1,4dichlorobenzene	75
dichlorodifluoromethane	7,000
1,1-dichloroethane	3,500
1,2-dichloroethane	5
di-n- butyl phthalate	3,500
di-noctyl phthalate	700
2,6-dinitrotoluene	70
ethyl benzene	700
lead	15
mercury	2
methylene chloride	5
nickel	100
silver	100
styrene	100
PCE 5	5
toluene	1,000
1,2,4-trichlorobenzene	70
TCE	5
vanadium	245
vinyl chloride	2
xylenes I	10,000

V. Progress Since the Last Review

This was the first five-year review for the site.

VI. Five-Year Review Process

The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. A five-year review does not reconsider decisions made during the selection of the remedy, but evaluates the implementation and performance of the selected remedy.

Document Review

On 18 March 2002, Phil Smith, Geotechnical Engineer, Steven Bath, and Sherry McCumber-Kahn, Environmental Engineers, all with the US Army Corps of Engineers (USACE), Savannah District, met with the EPA Project Manager, Charles King, and began reviewing the project files. Documents that were reviewed were related to site investigations, feasibility studies, remedial design, the RODs, construction reports, operation and maintenance plans and monitoring data. The complete list of documents is included as Attachment 1.

Data Review

The Mathis Brothers Landfill EPA Site has had 11 sampling events performed utilizing 20 monitoring wells since March 1, 1998. Three of the monitoring wells have one additional sampling event. Based on the data from the latest round of monitoring, April 3, 2002, the following contaminants were found to be above action levels: Mercury, Silver, trichloroethene (TCE), benzene, and bis(2-ethylhexyl)phthalate. The measured concentrations along with the action levels are arranged in the following table. Mercury and Silver were both detected in monitoring MW2, which had been dry for each of the previous 10 sampling events.

Table 4
Contaminant Levels

Contaminant	Measured Concentration (ug/L)	Action Level (ug/L)
Mercury	2.5	2.0
Silver	195	100
TCE	6.4	5.0
benzene	26.8/27.1*	5.0
bis(2-ethylhexyl)phthalate	73.9, 99.8, 9.8**	6.0

*Duplicate samples
*Concentrations found at three different wells: MW 5, 6, & 8 respectively.

There were hits of Mercury and Silver in other wells, but there concentrations were below action levels. The fact that both metals exceed action levels in MW2could be attributed to a concentration effect. It might be advisable to flush the well before the next sample is taken. The TCE was detected at monitoring well MW3 and is just barely above action level. The

concentrations are on a downward trend based on previous sampling data. (See Summary Tables Attachment A) Through natural attenuation, further reductions are expected. The benzene was detected at monitoring well MW4. Despite being five times the action level there has been a marked decrease from original concentration (124ug/L) detected. In addition, with just a few variations, the trend is downward overall. (See Summary Tables Attachment A) Natural attenuation will continue to reduce the concentration of benzene to be detected in the groundwater at this site. The bis(2-ethylhexyl)phthalate was found in monitoring wells MW5, MW6, and MW7. Monitoring well MW6 is the background well for the site. Its measured concentration of bis(2-ethylhexyl)phthalate, 99.8 ug/L, was the highest concentration detected. Since the well is located 600 feet north of the landfill and on the other side of a natural ground-water divide, it is unlikely that this detection is related to landfill contamination. It is more likely an artifact of field or lab activities.

Site Inspection

An inspection of the closed Mathis Brothers Landfill was performed by Mr. Steve Bath and Mr. Phil Smith, both with the US Army Corps of Engineers (USACE), Savannah District, on 3 April 2002. The inspection was performed concurrently with a ground-water sampling event being conducted by Mr. Joe Ricker and Mr. Norman Kennel of Memphis Environmental Center, Inc. Mr. Charles King, Project Manager with EPA Region 4, was also on-site during a portion of the inspection and sampling activities. The purpose of the inspection was to access the protectiveness of the completed remedy. The inspection generally included visual observation of the perimeter fencing used to restrict access, the condition of the landfill cap, and inspection of the areas immediately adjacent to landfill limits. The entire area inside the fenced boundary was visually inspected. The site inspection included both the areas of the geosynthetic clay liners (GCL) or cap and the areas immediately surrounding the liners. All areas inspected had good grass cover. No undesirable vegetation was observed. The grass cover and the general appearance of the landfill can seen on Photographs 1 and 2 in Attachment B to this report. Evidence of past erosion problems was noted in several locations, particularly on the north and east sides near the perimeter fencing. As shown in Photographs 3 and 4, these areas currently appear to be stable. There were not any signs of recent significant erosion. One area of moderately severe erosion was observed just outside the perimeter fence on the east side of landfill. While not causing any immediate concerns, this area should be monitored to ensure it does not encroach into the area being protected.

A very small escarpment with saturated soils was observed just inside an access gate on the north side of the landfill. This feature is located in a relatively low area that is outside the GCL. This area is located where previous inspection reports noted seeps and erosion on the north slope near the perimeter fence. The previously reported seeps are documented in Bechtel Environmental letter dated 15 April 1998 (subject of Review and Site Walk Down of the Leachate) and attached Meeting Notes dated 23 March 1998, Area of Concern #3 and #4. There was no visible seepage or standing water during the 3 April 2002 inspection. The area appears to have generally stabilized since the 1998 inspection. Based on conversations with Mr. Ricker and Mr. Kennel, the area appeared to be in a condition similar to their more recent site visits. Just outside the fence in the same area near monitoring well MW-5, small areas of saturated surface soils and small depressions with standing water were observed. One of the depressions is shown in Photograph 5. Mr. Ricker and Mr. Kennel also indicated that this condition was typical based on previous site visits. The exact source of the saturated soils and surface water could not be

established by inspection. A likely source could be a soil layer or seam that is near or at the surface and has a higher hydraulic conductivity than surrounding soils. Since all landfill materials were excavated and hauled off site and the ground-water test results from the closest monitoring well MW-5 does not indicate any contamination, the saturated soils/standing water likely does not present any health or safety problems. However, to verify this conclusion, it is recommended that the standing water in one of the depressions near monitoring well MW-5 be sampled and tested for the contaminants of concern.

The protective measures employed, perimeter fencing and the GCL/cap, appear to be in excellent condition and performing their intended purpose. The cap and surrounding area appeared undisturbed. There were no observed uses of ground water in the immediate vicinity of the landfill.

Interviews

On 3-4 April 2002, Phil Smith, and Steven Bath, visited the Mathis Brothers Landfill site. Mr. Joe Ricker, PE, Environmental Project Coordinator for Memphis Environmental Center, Inc. and Mr. Norman Kennel, PG, Senior Project Manager for Premier Environmental Services were interviewed on the site. Both Mr. Ricker and Mr. Kennel have been involved with the remedial actions at the site and in particular the ground-water monitoring program. They are not aware of any problems on the site and do not have concerns with the way things are progressing. Mr. Ricker indicated that the above ground protective casing for monitoring well MW-5 had been damaged by lawnmowers. The monitoring well itself was not damaged and the protective cover would be replaced. Mr. Ricker and Mr. Kennel escorted us around the site to show us the monitoring wells and the location of the seeps. No other individuals familiar with the site and its status were interviewed.

Based on conversation with Mr. Charles King of EPA, Mr. Mose Mathis Sr. (property owner) has not, as of the date of the site inspection, signed a deed restriction to limit the use of the landfill property. This will be the last item necessary to complete all controls listed in the Record of Decision and the Remedial Action Design.

VII. Technical Assessment

Question A: Is the remedy functioning as intended by the decision documents?

The review of documents, ARARs, risk assumptions and analytical data and site inspections indicate the remedy is functioning as intended by the ROD. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The cap is in good condition and should continue to prevent water from infiltrating any remaining soil contamination. The only item of the ROD that has not been completed to date is the restriction of ground-water use to be placed on the property deed. This will reduce the risk of human exposure or ingestion of contaminated ground water.

Question B: Are the exposure assumptions, toxicity data, cleanup levels and remedial action objectives (RAOs) used at the time of the remedy selection still valid?

There have been no changes in the site or surrounding properties that would affect the protectiveness of the remedy.

ARARs identified and listed in the amended Mathis Brothers ROD addressed a broad range of federal and state chemical specific and action specific ARARs. As stated in the 5-year review guidance, the focus of an ARAR review should be limited to those ARARs that have the potential to impact human health and the environment and specifically address the protectiveness of the remedy. To that end, ARARs called out in the ROD that were associated with construction and operation and maintenance activities of the remedy are not addressed in this review. Those ARARs associated with the protection of the remedy are the specific focus of the review.

Of the ARARs listed in the amended ROD, the following Federal and State chemical-specific and action-specific ARARS were carried forward for assessment.

Federal chemical-specific ARARs

Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (40 CFR 141 and 143) – Standards for select organic compounds, minerals, or metals that are enforceable standards for public drinking water systems. 40 CFR 141 and 143

Clean Water Act Ambient Water Quality Criteria requirements – Suggested ambient standards for the protection of human health and aquatic life. Presented in CERCLA Compliance Manual, 33 USC 300

State chemical-specific ARARs

Georgia Water Quality Control Act Rules and Regulations for Water Quality Control – State-mandated ambient water quality standards with respect to state-wide surface waters and effluent discharge standards. Act No. 870, Chapter 391-3-5

Georgia Safe Drinking Water Act of 1977 Rules for Safe Drinking Water – State standards that set contaminant levels and treatment techniques to satisfy requirements of 42 USC 300 for public water systems. Act No. 231, Chapter 391-3-5

Table 5
Drinking Water Standard Summary

COC	Action Level (ug/l)	ARAR Federal MCL 7/1/01	Risk Based	State Criterion 6/28/01	Comments
Acetone	3500		•		
Benzene	5	•		same	
Benzoic Acid	140000		•		
Benzonitrile	43		•		
Benzyl Alcohol	10500		•		
(Bis(2-ethyhexyl Phthalate	6	•		same	1992 ROD surface water contaminant
Chlorobenzene	100		•		
Chromium fil/un	100	•		same	
2, 4 - D	70	•		same	
Dicamba	1050		•		
1,4 Dichlorobenzene (para-Dichlorobenze)	75	•		same	
1,1-Dichloroethane	3500		•		
1,2 Dichloroethane	5	•		same	
Di-n-butyl Phthalate	3500				
Di-n-octyl Phthalate	700				
2,6 Dintrotoluene	70		•		
Ethyl Benzene	700	•			
Lead fil/un	15	• (action level)		same	
Mercury fil/un	2	•		same	
Methylene Chloride	5	•		same	
Nickel fil/un	100	Federally vacated 6/2/95		100	No longer has a federal MCL
Silver fil/un	100				Secondary MCL (40 CFR 143) also identified in 1992 ROD as surface water contaminant.
Styrene	100	•		same	
Tetrachloroethene	5	•		same	
Toluene	1000	•		same	
1,2,4-Trichlorobenzene	70	•		same	
Trichloroethene	5	•		same	
Vanadium fil/un	245		•		
Vinyl Chloride	2	•		same	
Xylenes (total)	10000	•		same	

The State of Georgia has adopted the federal drinking water standards in their entirety. As can be seen from the previous table, little change has occurred regarding values originally identified in the ROD and the currently promulgated standards. The single exception is the value for nickel. That value of 100 ug/l was rescinded on June 29, 1995 (60 FR 33926). The State of Georgia still maintains a 100 ug/l MCL for nickel.

Three constituents were identified in the original ROD as exceeding AWQC in surface water. The discussion in the ROD was addressing an existing "remnant pit" that was present on site. There is no later discussion about the status of the permit or the applicability of surface water criteria to the site. Bis(2-ehtylhexyl) phthalate heptachlor, and silver were identified as COC's for the surface water. Heptachlor is excluded from the ground water monitoring program, however, the phthalate and silver were included in the quarterly sampling and analysis events.

In addition to ARARs and in line with the suggested evaluation of remedy protectiveness, the amended ROD states "When ARARs are not available for specific compounds or exposure media (such as groundwater), the cleanup goals are based on non-promulgated advisories or guidance such as proposed federal MCLGs, lifetime Health Advisories (HAs), and reference does (RfD) based guidelines."

The exposure assumptions used to develop the Human Health Risk Assessment included both current exposures (trespasser) and potential future exposures (adult resident, child resident). These assumptions are considered to be conservative and reasonable in evaluating risk and developing risk based cleanup levels. No changes to these assumptions, or the cleanup levels developed from them is warranted. There has been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy.

Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No additional information has been identified that would call into question the protectiveness of the remedy.

Technical Assessment Summary

Based on the data reviewed, the site inspection and interviews with the PRP, the remedy is functioning as intended by the ROD. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. ARARs for drinking water and surface water were evaluated to determine if the remedy is still protective. Based on the ARAR review, no values of drinking water standards (i.e. MCLs) have changed to any degree that would negatively affect the protection of the remedy. Ground-water contamination at the site persists above action levels and requires continued monitoring to ensure it attenuates as expected. The only item of the ROD that has not been completed to date is the Restriction of ground-water use to be placed on the property deed.

VIII. Issues

Issue	Currently Affects Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Ground-water contamination still detected above Action Levels	N	N
Deed Restriction still not in place	Y	Y

IX. Recommendations and Follow-Up Actions

Issue	Recommendation/ Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
Ground-water contamination	Continue monitoring to ensure degradation of ground-water contamination.	PRP	EPA		N	N
Deed Restriction Not in Place	Place Restriction on Property use as required by ROD.	EPA	EPA		Y	Y

X. Protectiveness Statement

The remedial actions at the site are expected to be protective of human health and the environment upon attainment of ground-water cleanup goals. Contaminant levels in ground water appear to be declining to acceptable risk based concentrations. Continued ground-water monitoring is required to ensure contaminants are attenuating naturally. Institutional controls in the form of deed restrictions must be implemented to prevent possible ground-water exposure.

XI. Next Review

The next five-year review for the Mathis Brothers Landfill at South Marble Top Road Superfund Site is required by August 2007, five years from the date of this review. This review should ensure any contaminants still detected in the monitoring well network have declined to the required cleanup levels.

Attachments

Attachment A
List of Documents Reviewed

Remedial Investigation Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, January 1992

Declaration of the Record of Decision Mathis Brothers South Marble Top Road Landfill Site, EPA, Atlanta, GA. March 1993.

Declaration of the Amended Record of Decision Mathis Brothers South Marble Top Road Landfill Site, EPA, Atlanta, GA. September 1996.

Remedial Design Workplan South Marble Top Road Landfill Site, Engineering-Science, Inc., Atlanta, GA., November 1993.

Additional Site Investigation South Marble Top Road, Landfill NPL Site, Parsons Engineering Science, Atlanta, GA., September 1995.

Remedial Action Planning Submittal, Performance Standards Verification Plan South Marble Top Road Landfill NPL Site, Parsons Engineering Science, Atlanta, GA., September 1996.

Operations and Maintenance Plan Mathis Brothers South Marble Top Road Landfill Site, Parsons Engineering Science, Atlanta, GA., October 1997.

Remedial Action Report Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, February 1998.

Final Construction Report Mathis Brothers South Marble Top Road Landfill Site, Memphis Environmental Center, Memphis Tennessee, February 1998.

Ground-Water Analytical Data from the various monitoring events, Memphis Environmental Center.

Attachment B
Images Documenting Site Conditions

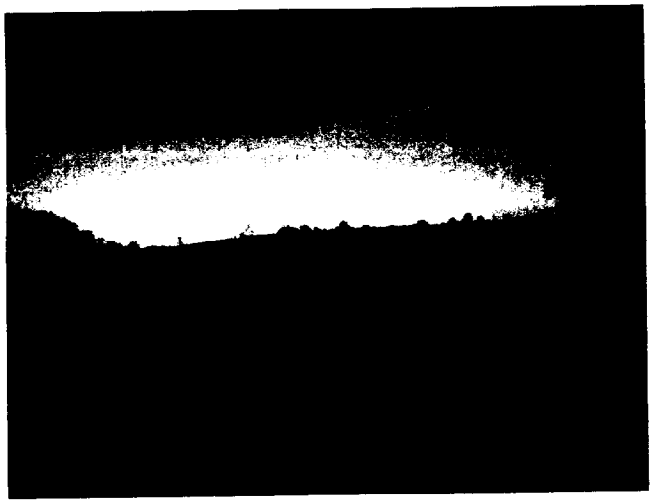
PHOTOGRAPH 1
APPEARANCE OF LANDFILL CAP LOOKING EAST FROM THE TOP THE KNOLL IN THE CENTER OF LANDFILL

PHOTOGRAPH 2
APPEARANCE OF LANDFILL CAP LOOKING NORTHWEST FROM THE TOP THE KNOLL IN THE CENTER OF LANDFILL

PHOTOGRAPH 3
AREA OF PAST EROSION PROBLEMS ALONG THE PERIMETER FENCE ON THE NORTH SIDE OF THE LANDFILL

PHOTOGRAPH 4
AREA OF PAST EROSION PROBLEMS ADJACENT TO THE PERIMETER FENCE NEAR THE EAST SIDE OF THE LANDFILL

PHOTOGRAPH 5
STANDING WATER IN A DEPRESSION NEAR MONITORING WELL 5



PHOTOGRAPH 6
APPEARANCE OF LANDFILL CAP LOOKING EAST UP THE KNOLL IN THE CENTER OF LANDFILL 5

Attachment C
Analytical Data Tables

Table 1. Summary Analytical Results MW 1

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	5	2	5	1.5	1.3	1.3	1.5	1.2	1.2	1.3	NA	1.23/1.04	ND
Benzoic Acid	140000	ND	ND	ND	ND	ND	50	ND	4.5	ND	NA	ND	ND
Benzonitrile	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**6.54**	4.2	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Chlorobenzene	100	5	6.2	4.6	4.5	2.6	4.4	3	ND	2.4	NA	3.12/2.97	2.6
Chromium filtered/unfiltered	100	ND/74	ND/157	ND/400	ND/280	ND/ND	ND/ND	ND/110	ND/190	ND/23	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	10.4	ND	19	12	ND	11	ND	11	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	14/16	ND/37	ND/81	ND/70	ND/ND	ND/10	ND/17	ND/44	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND	ND/0.26	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	ND	ND	NDJ	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	19/ND	ND	ND/72	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/131	ND/245	ND/460	ND/420	ND/ND	ND/ND	ND/160	ND/300	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 2. Summary Analytical Results MW 2

COCs	Action Level (ug/L)	3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	60
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND/ND
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	**2.5**
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND/ND
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	**195**
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND/ND
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 3. Summary Analytical Results MW 3

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Benzene	5	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	**13.7**	ND
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	ND/100	ND/ND	ND/ND	ND/77	NA	ND/ND	25
2,4-D	70	Dry	Dry	Dry	Dry	Dry	ND	NA	ND	ND	NA	ND	ND
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	ND	NA	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	ND	4.9	4.9	4.1	NA	2.73	2.46
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	ND	29	34	ND	NA	ND	25.9
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	**36**	NA	ND	ND
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	ND/17	ND/11	ND/9.8	ND/6.5	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	ND/ND	ND/ND	ND/ND	ND/44	NA	ND/ND	54
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	ND	**9**	**11**	**13**	NA	**7.16**	**6.4**
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	ND	ND	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 4. Summary Analytical Results MW 4

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	w/Dup 4/3/2002
Acetone	3500	194	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Benzene	5	**124**	Dry	Dry	ND	**140**	ND	Dry	ND	**30**	ND	**50.6**	**26.8/27.1**
Benzoic Acid	140000	9001	Dry	Dry	39000	24000	78000	Dry	96000	14000	NA	2018JL	1480/448
Benzonitrile	43	25	Dry	Dry	**3900J**	(1200)NJ	**290**	Dry	ND	ND	NA	76.9	ND
Benzyl Alcohol	10500	29.4	Dry	Dry	340	ND	ND	Dry	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**6.14**	Dry	Dry	ND	ND	ND	Dry	ND	**9.2**	NA	ND	ND
Chlorobenzene	100	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	2.63	2.37/2.37
Chromium filtered/unfiltered	100	8.0/88	Dry	Dry	NA/ND	ND/ND	ND/90	Dry	ND/ND	ND/24	NA	ND/ND	ND/ND
2,4-D	70	47.9	Dry	Dry	60	ND	ND	Dry	ND	ND	NA	ND	ND
Dicamba	1050	84.6	Dry	Dry	25	ND	ND	Dry	ND	16	NA	10.1	ND
1,4-Dichlorobenzene	75	ND	Dry	Dry	ND	ND	ND	Dry	ND	12	NA	ND	ND
Dichlorodifluoromethane	7000	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	3.6	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Di-n-butyl Phthalate	3500	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	Dry	Dry	ND	170	ND	Dry	ND	ND	ND	47.7	54.3/53.3
Lead filtered/unfiltered	15	ND/ND	Dry	Dry	NA/ND	ND/ND	ND/11	Dry	ND/9.2	ND/8.9	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	Dry	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Nickel filtered/unfiltered	100	**121/178**	Dry	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	Dry	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	15.3	ND
Tetrachloroethene	5	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Toluene	1000	**1320**	Dry	Dry	**12000**	**5600**	**5000**	Dry	**5300**	580	**4400**	**1150**	984/993
1,2,4-Trichlorobenzene	70	27.3	Dry	Dry	ND	ND	ND	Dry	ND	41	NA	20.8	22.4/26.1
Trichloroethene	5	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	Dry	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	Dry	Dry	ND	ND	ND	Dry	ND	ND	ND	ND	ND
Xylenes	10000	148.3	Dry	Dry	ND	ND	650	Dry	1200	210	650	321	299.4/291.6

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 5. Summary Analytical Results MW 5

COCs	Action Level (ug/L)	3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	2.07	3.66
Benzoic Acid	140000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzonitrile	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**27**	ND	ND	**8.4**	**9.5**	ND	ND	ND	ND	NA	ND	**73.9**
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	2.17	5.69
Chromium filtered/unfiltered	100	ND/ND	ND/ND	NA/23	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	ND	ND	10	ND	NA	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	ND	**99**	ND	ND	ND	14	NA	19.3	34.2
Dichlorodifluoromethane	7000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	4.43
Lead filtered/unfiltered	15	ND/ND	ND/ND	NA/9.3	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	6.2/5	ND/ND	NA/0.58	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/3.3	0.2
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	ND/11	ND/ND	NA/51	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/35	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/12	NA	ND/ND	ND/ND
Styrene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	ND	2	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	NA/7.4	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	ND	ND	2.8	ND	ND	ND	ND	NA	5.22	16.42

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 6. Summary Analytical Results MW 6

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND/26.9	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzoic Acid	140000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzonitrile	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**6.24/11.9**	ND	**8.8**	ND	ND	ND	ND	ND	ND	NA	ND	**99.8**
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/ND	ND/ND	NA/11	NA/260	NA/ND	ND/280	ND/ND	ND/ND	ND/19	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/ND	ND/ND	NA/3.3	NA/60	NA/ND	ND/48	ND/ND	ND/ND	ND/3.7	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	NA/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	12.0/12.0	ND/ND	NA/7.8	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	NA/10	NA/350	NA/ND	ND/390	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 7. Summary Analytical Results MW 7

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Benzene	5	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Benzoic Acid	140000	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Benzonitrile	43	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**152**	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Chlorobenzene	100	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Toluene	1000	3	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	Dry	NA/ND	ND/ND	ND/ND	Dry	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	Dry	ND	ND	ND	Dry	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 8. Summary Analytical Results MW 8

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzoic Acid	140000	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Benzonitrile	43	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**10.1**	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	5	**9.8**
Chlorobenzene	100	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Dicamba	1050	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	Dry	Dry	Dry	NA	Dry	Dry	Dry	ND	NA	ND	ND
Ethyl Benzene	700	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Nickel filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Tetrachloroethene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Toluene	1000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Trichloroethene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	Dry	Dry	Dry	NA/NA	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Xylenes	10000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 9. Summary Analytical Results MW 9

COCs	Action Level (ug/L)	3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	140000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzonitrile	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**6.82**	ND	ND	ND	ND	**13**	ND	ND	ND	ND	4.26	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium filtered/unfiltered	100	ND/ND	ND/ND	NA/6.8	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/24	ND/52	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
Dicamba	1050	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl Benzene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead filtered/unfiltered	15	ND/ND	ND/ND	NA/6.6	ND/6.9	ND/ND	ND/ND	ND/5.3	ND/9.1	ND/9.9	ND/13	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel filtered/unfiltered	100	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND
Styrene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	NA/8.6	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 10. Summary Analytical Results MW 10

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	5	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Benzoic Acid	140000	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Benzonitrile	43	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Chlorobenzene	100	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/91	ND/ND	NA/230	Dry	NA/78	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	Dry	ND	ND	NA	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	ND	Dry	ND	ND	NA	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/27	ND/ND	NA/94	Dry	NA/19	ND/9.1	ND/ND	ND/5.1	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND	ND/ND	NA/0.81	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	12/ND	ND/ND	NA/100	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	ND	Dry	3.1	ND	ND	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/111	ND/ND	NA/300	Dry	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	ND	Dry	ND	ND	ND	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 11. Summary Analytical Results MW 11

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 12. Summary Analytical Results MW 12

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzoic Acid	140000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzonitrile	43	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**7.14**	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Chlorobenzene	100	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Dicamba	1050	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Ethyl Benzene	700	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/3.5	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Nickel filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Tetrachloroethene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Toluene	1000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Trichloroethene	5	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	Dry	Dry	Dry	ND/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND
Xylenes	10000	ND	Dry	Dry	Dry	ND	Dry	Dry	Dry	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 13. Summary Analytical Results MW 13

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 14. Summary Analytical Results MW 14

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	**9.88**	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	ND	ND	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 15. Summary Analytical Results MW 15

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 16. Summary Analytical Results MW 16

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Benzene	5	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Benzoic Acid	140000	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Benzonitrile	43	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**14.1**	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Chlorobenzene	100	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/94	ND/ND	Dry	Dry	NA/150	Dry	ND/210	Dry	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	Dry	Dry	ND	Dry	NA	Dry	ND	NA	ND	ND
Dicamba	1050	ND	ND	Dry	Dry	ND	Dry	NA	Dry	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/16	ND/ND	Dry	Dry	ND/ND	Dry	ND/14	Dry	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	Dry	Dry	ND/ND	Dry	ND/ND	Dry	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Nickel filtered/unfiltered	100	13/ND	ND/ND	Dry	Dry	ND/ND	Dry	ND/ND	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	Dry	Dry	ND/ND	Dry	ND/ND	Dry	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Toluene	1000	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Trichloroethene	5	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/96	ND/ND	Dry	Dry	ND/ND	Dry	ND/94	Dry	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND
Xylenes	10000	ND	ND	Dry	Dry	ND	Dry	ND	Dry	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 17. Summary Analytical Results MW 17

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 18. Summary Analytical Results MW 18

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 19. Summary Analytical Results MW 19

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Benzene	5	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Benzoic Acid	140000	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Benzonitrile	43	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**6.24**	ND	ND	Dry	**6.8**	Dry	Dry	Dry	ND	ND	ND	ND
Chlorobenzene	100	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND/290	NA	ND/ND	ND/ND
Chromium filtered/unfiltered	100	ND/510	ND/ND	ND/810	Dry	NA/140	Dry	Dry	Dry	ND	ND	ND	ND
2,4-D	70	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Dicamba	1050	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Ethyl Benzene	700	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Lead filtered/unfiltered	15	ND/14	ND/ND	ND/87	Dry	NA/6.8	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	ND/0.87	Dry	NA/ND	Dry	Dry	Dry	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND/120	NA	ND/ND	ND/ND
Nickel filtered/unfiltered	100	68/ND	ND/ND	ND/330	Dry	NA/ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	ND/ND	Dry	NA/ND	Dry	Dry	Dry	ND	ND	ND	ND
Styrene	100	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Toluene	1000	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND/ND	NA	ND/ND	ND/ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	ND/160	Dry	NA/ND	Dry	Dry	Dry	ND	ND	ND	ND
Vinyl Chloride	2	ND	ND	ND	Dry	ND	Dry	Dry	Dry	ND	ND	ND	ND
Xylenes	10000	ND	ND	ND	Dry	ND	Dry	Dry	Dry				

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 20. Summary Analytical Results MW 20

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzoic Acid	140000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzonitrile	43	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Benzyl Alcohol	10500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Bis(2-ethylhexyl)Phthalate	6	**26.3**	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Chlorobenzene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Chromium filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
2,4-D	70	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND
Dicamba	1050	ND	ND	ND	ND	ND	ND	NA	ND	ND	NA	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Dichlorodifluoromethane	7000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,1-Dichloroethane	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-butyl Phthalate	3500	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Di-n-octyl Phthalate	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
2,6-Dinitrotoluene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Ethyl Benzene	700	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Lead filtered/unfiltered	15	ND/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Mercury filtered/unfiltered	2	ND/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Nickel filtered/unfiltered	100	14/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Silver filtered/unfiltered	100	ND/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Styrene	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Toluene	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
1,2,4-Trichlorobenzene	70	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Vanadium filtered/unfiltered	245	ND/ND	ND/ND	NA/ND	NA/ND	ND/ND	ND/ND	ND/ND	ND/ND	ND/ND	NA	ND/ND	ND/ND
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND
Xylenes	10000	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level

Table 21. Summary Analytical Results MW 21

COCs	Action (ug/L)	Level 3/1/1998	6/1/1998	9/1/1998	12/1/1998	3/1/1999	6/1/1999	9/1/1999	12/1/1999	3/1/2000	10/1/2000	3/1/2001	4/3/2002
Acetone	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzoic Acid	140000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzonitrile	43	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Benzyl Alcohol	10500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Bis(2-ethylhexyl)Phthalate	6	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chlorobenzene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Chromium filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,4-D	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dicamba	1050	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,4-Dichlorobenzene	75	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Dichlorodifluoromethane	7000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,1-Dichloroethane	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2-Dichloroethane	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-butyl Phthalate	3500	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Di-n-octyl Phthalate	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
2,6-Dinitrotoluene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Ethyl Benzene	700	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Lead filtered/unfiltered	15	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Mercury filtered/unfiltered	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Methylene Chloride	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Nickel filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Silver filtered/unfiltered	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Styrene	100	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Tetrachloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Toluene	1000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
1,2,4-Trichlorobenzene	70	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Trichloroethene	5	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vanadium filtered/unfiltered	245	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Vinyl Chloride	2	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA
Xylenes	10000	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	NA	NA	NA

ND-not detected; NA-not analyzed; J-estimated value; NJ analyzed for as a tentatively identified compound; Bold - above action level